| The state of the s | PTO/SB/05-(03-01)  |
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| UTILITY  | Attorney Docket No. CL001147DIV  |
| PATENT APPLICATION   | First Inventor Weiniu GAN et al.   |
| TRANSMITTAL  | ISOLATED HUMAN ENZYME PROTEINS, NUCLEIC ACID MOLECULES  Title ENCODING HUMAN ENZYME PROTEINS, AND USES THEREOF   |
| (Only for new nonprovisional applications under 37 CFR 1.53(b))  | Express Mail Label No.   |
| APPLICATION ELEMENTS   | ASSISTANT Commissioner for Patents   |
| See MPEP chapter 600 concerning utility patent application contents.   | ADDRESS TO: Box Patent Application Washington, DC 20231  |
| 1. Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a dupticate for fee processing)  | 7. CD-ROM or CD-R in duplicate, large table or   |
| Applicant claims small entity status.  | Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission   |
| See 37 CFR 1.27.  See 37 CFR 1.27.  [Total Pages 52]   | (if applicable, all necessary)   |
| (preferred arrangement set forth below)     Descriptive title of the invention.  | a. Computer Readable Form (CRF)  |
| - Cross Reference to Related Applications  | b. Specification Sequence Listing on:  |
| <ul> <li>Statement Regarding Fed sponsored R &amp; D</li> <li>Reference to sequence listing, a table,</li> </ul>   | i. CD-ROM or CD-R (2 copies); or   |
| or a computer program listing appendix - Background of the Invention   | <u> </u>   |
| - Brief Summary of the Invention   | c. A Statements verifying identity of above copies  ACCOMPANYING APPLICATION PARTS   |
| <ul> <li>Brief Description of the Drawings (if filed)</li> <li>Detailed Description</li> </ul>   | 9. Assignment Papers (cover sheet & document(s))   |
| - Claim(s)<br>- Abstract of the Disclosure   | 10. 37 CFR 3.73(b) Statement Power of Attorney   |
| 4. X Drawing(s) (35'U.S.C. 113) [ Total Sheets 47]   | 11. English Translation Document (if applicable)   |
| 5. Oath or Declaration [ Total Pages 2 ]   | 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations  |
| a. Newly executed (original or copy)   | 13. Preliminary Amendment  |
| b. Copy from a prior application (37 CFR 1.63 (d)) (for continuation/divisional with Box 18 completed)   | 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)   |
| i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s)  | 15. Certified Copy of Priority Document(s) (if foreign priority is claimed)  |
| named in the prior application, see 37 GFR 1.63(d)(2) and 1.33(b).   | 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35  |
| 6. X Application Data Sheet. See 37 CFR 1.76   | or its equivalent.   |
| 18. If a CONTINUING APPLICATION, check appropriate box, and supp   | the second of th |
| or in an Application Data Sheet under 37 CFR 1.76:   |  |
| Continuation Divisional Continuation-in-part (CIP)  Prior application information: Examiner Kathleen M. KERR   | of prior application No.: 09 , 816,095   |
| Prior application information: Examiner Kathleen M. KERR For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the  |  |
| Box 5b, is considered a part of the disclosure of the accompanying continu<br>The incorporation <u>can only</u> be relied upon when a portion has been inadver   | lation or divisional application and is hereby incorporated by reference.  |
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|  | ephone Fax   |
| Name (Print/Type) Justin D. Karjala, Reg No. 43,704  | Registration No. (Attorney/Agent)  |
| Signature Lat D Land   | 4 ( 2002   |
| Digitaluic Lange   | Date   August 6, 2003  |

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PTO/SB/17 (05-03)
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|   | TDANCMITTAL                        |                             |                  |                                 |                   | Compl te if Known |  |   |  |  |  |
|---|------------------------------------|-----------------------------|------------------|---------------------------------|-------------------|-------------------|--|---|--|--|--|
| [   |                                    |                             | <b>L</b> [       | Application Number              |                   |                   | er To Be A   | To Be Assigned                                    |  |  |  |
| for FY 2003  Effective 01/01/2003. Patent fees are subject to annual revision.                                |                                    |                             |                  | Filing Date                     |                   |                   | August   | August 6, 2003                                    |  |  |  |
|   |                                    |                             |                  | First Named Inventor            |                   |                   | tor GAN e  | GAN et al.  |  |  |  |
|   |                                    |                             |                  | Examiner Name                   |                   |                   | KERR,  | KERR, Kathleen                                    |  |  |  |
| Applicant claims small entity status. See 37 CFR 1.27   |                                    |                             |                  | Art Unit                        |                   |                   | 1652   | 1652  |  |  |  |
| TOTAL AMOUNT OF PAYMENT (\$) 750  |                                    |                             |                  | Attorney Docket No. CL001147DIV |                   |                   |  |   |  |  |  |
| METHOD OF PAYMENT (check all that apply)  |                                    |                             |                  | FEE CALCULATION (continued)     |                   |                   |  |   |  |  |  |
| Check Cre   | 3. A                               | 3. ADDITIONAL FEES          |                  |                                 |                   |                   |  |   |  |  |  |
| Deposit Accour  |                                    | Large Entity   Small Entity |                  |                                 |                   |                   |  |   |  |  |  |
| Denosit   |                                    |                             | Fee<br>Code      |                                 | Fee I<br>Code     | Fee<br>(\$)       | Fee I  | Description                                       | Fee Paid   |  |  |
| Account<br>Number   |                                    |                             |                  | 130                             | 2051              | 65                | Surcharge - late   | filing fee or oath                                |  |  |  |
| Deposit<br>Account CELERA GENOMICS  |                                    |                             |                  | 50                              | 2052              |                   | Surcharge - late<br>cover sheet                                    | harge - late provisional filing fee or            |  |  |  |
| Name  |                                    |                             |                  | 130                             | 1053              |                   |  | Inglish specification                             |  |  |  |
| The Director is authorized to: (check all that apply)  Charge fee(s) indicated below  Credit any overpayments |                                    |                             |                  | 2,520                           | 1812 2            | ,520              | For filing a reque   | ing a request for ex parte reexamination          |  |  |  |
| Charge any additional fee(s) during the pendency of this application  |                                    |                             |                  | 920*                            | 1804              |                   | Requesting public<br>Examiner action                               | esting publication of SIR prior to                |  |  |  |
| Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.             |                                    |                             | 1805             | 1,840*                          | 1805 1            | ,840*             |  | esting publication of SIR after                   |  |  |  |
| FEE CALCULATION   |                                    |                             | 1251             | 110                             | 2251              | 55                | Extension for re   | nsion for reply within first month                |  |  |  |
| 1. BASIC FILING FEE   |                                    |                             | 1252             | 410                             | 2252              | 205               | Extension for re   | nsion for reply within second month               |  |  |  |
| Large Entity Small E  | ntity                              |                             | 1253             | 930                             | 2253              | 465               | Extension for re   | eply within third month                           | [  |  |  |
| Fee Fee Fee I<br>Code (\$) Code   | Fee Description  \$)               | Fee Paid                    | 1254             | 1,450                           | 2254              | 725               | Extension for re   | eply within fourth month                          |  |  |  |
| 1001 750 2001   | 375 Utility filing fee             | 750                         | 1255             | 1,970                           | 2255              | 985               | Extension for re   | eply within fifth month                           |  |  |  |
| 1002 330 2002   | 165 Design filing fee              |                             | 1401             | 320                             | 2401              | 160               | Notice of Appea  | al  |  |  |  |
| 1003 520 2003   | 260 Plant filing fee               |                             | 1402             |                                 | 2402              |                   |  | support of an appeal                              |  |  |  |
|   | 375 Reissue filing fe              | e                           | 1403             |                                 | 2403              |                   | Request for ora  | -   |  |  |  |
| 1005 160 2005   | 80 Provisional filing SUBTOTAL (1) |                             | 1451             |                                 |                   |                   |  | ute a public use proceeding                       |  |  |  |
| 1   | 1452                               |                             | 2452             |                                 | Petition to reviv |                   |  |   |  |  |  |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE   |                                    |                             |                  | 1,300                           | 2453              |                   |  | e - unintentional                                 |  |  |  |
| Total Claims 14 -20** = 0 X Fee From below Fee Paid Independent Claims 3 - 3** = 0 X                          |                                    |                             |                  | 1,300<br>470                    | 2501<br>2502      |                   | Utility issue fee<br>Design issue fe                               | ,   |  |  |  |
|   |                                    |                             |                  | 630                             | 2503              |                   | Plant issue fee  | ´ •   |  |  |  |
|   |                                    |                             |                  | 130                             | 1460              |                   |  |   |  |  |  |
| Multiple Dependent  |                                    |                             | 1807             | 50                              | 1807              |                   |  | essing fee under 37 CFR 1.17(q)                   |  |  |  |
| Large Entity   Sma  |                                    | _                           | 1806             | 180                             | 1806              |                   | -  | nformation Disclosure Stmt                        |  |  |  |
| Fee Fee Fee Code (\$)   | Fee <u>Fee Descri</u> j<br>e (\$)  | otion                       | 8021             | 40                              | 8021              |                   | Recording each   | patent assignment per                             |  |  |  |
|   | 02 9 Claims in exce                | ess of 20                   | 1809             | 750                             | 2809              |                   | property (times  | number of properties) sion after final rejection  | <del>                                     </del> |  |  |
| 1201 84 22  | 01 42 Independent c                | aims in excess of 3         | 1009             | 100                             | 2009              | 3/3               | (37 CFR 1.129)   |   | I  |  |  |
|   | 1.                                 | dent claim, if not paid     | 1810             | 750                             | 2810              | 375               |  | onal invention to be                              |  |  |  |
| 1204 84 2204 42 ** Reissue independent claims over original patent  |                                    | 1801                        | 750              | 2801                            | 375               | •                 | examined (37 CFR 1.129(b)) Request for Continued Examination (RCE) |   |  |  |  |
| 1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent                                     |                                    |                             |                  | 900                             | 1802              |                   | Request for ex   | uest for expedited examination design application |  |  |  |
|   | Other                              | Other fee (specify)         |                  |                                 |                   |                   |  |   |  |  |  |
| SUBTOTAL (2) (\$) 0 Other fee (specify) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)                   |                                    |                             |                  |                                 |                   |                   |  |   |  |  |  |
| SUBMITTED BY (Complete (if applicable)  |                                    |                             |                  |                                 |                   |                   |  |   |  |  |  |
| Name (Print/Type)   | Justin D. Karjala                  |                             | Registration No. |                                 |                   |                   | 704  | Telephone 240-453-3812                            |  |  |  |
| 76 7  | - Julyana                          |                             |                  | Attomey/                        | Agent)            | 70,               |  |   |  |  |  |

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Date

August 6, 2003

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